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August 30, 2017

VIA ELECTRONIC FILING
Ms. Jocelyn Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Dr., Suite 100
Columbia, SC 29210

RE: Proposed Modifications to the Residential Home Energy Improvement Program
Docket Number: 2016-149-E

Dear Ms. Boyd:

Pursuant to Commission Order No. 2015-596 issued August 19, 2015, in Docket No. 2015-163-E, Duke Energy Progress, LLC ("DEP" or the "Company) hereby submits for approval its proposed modifications to its Residential Home Energy Improvement Program ("HEIP"). This letter is accompanied by the following:

1. Attachment A: Proposed Program Tariff;
2. Attachment B: The projected program participation and impacts data; and
3. Attachment C: The program cost-effectiveness test results.

The purpose of this Program is to address the largest single source of energy consumption in a residential customer's home by encouraging residential customers in existing homes to become more energy efficient through the installation of high efficiency air conditioners and heat pumps ("HVAC"). The Program also provides incentives for duct repair, insulation and sealing, heat pump water heaters, high efficiency room air conditioners, and HVAC equipment audits.

Although this Program is a long-standing and critical component of the Company's portfolio of energy efficiency programs, its cost-effectiveness has become challenged. This challenge is primarily driven by the fact that, as the efficiency standards have advanced, the incremental efficiency associated with each successive SEER rating decreases, while the incremental cost of exceeding the standard SEER rating increases. DEP is requesting the commission to approve the following modifications to its Program in order to enhance the HEIP Program's cost effectiveness:

1. As with the corresponding Duke Energy Carolinas, LLC ("DEC") proposal in Docket No. 2013-298-E, rename HEIP as "Residential Service – Smart $aver Energy Efficiency Program" ("Smart $aver");

2. Eliminate the existing tier structure for HVAC incentives;

3. Remove incentives for HVAC devices with a SEER of less than 15;

4. Discontinue HVAC tune up measures; and

5. Remove incentives for high efficiency room air conditioners.

In addition, DEP proposes to modify the HEIP Program tariff to mirror the tariff for the related DEC program – i.e., the HVAC-EE. DEC and DEP are requesting that both the HVAC-EE Program and HEIP, respectively, each be renamed "Residential Service – Smart $aver Energy Efficiency Program." A modified version of the HVAC-EE tariff is being filed for approval in Docket No. 2013-298-E concurrently with DEP's request in this docket.

DEP believes the requested program modifications will substantially increase the cost-effectiveness of the former HEIP Program (now Smart $aver). The Company has modeled the new Residential Smart $aver Program's cost effectiveness results, with the proposed modifications and the results are provided in the following table:

Cost Effectiveness Tests	Cost Effectiveness Results
Utility Cost Test *(UCT)*	2.81
Total Resource Cost Test *(TRC)*	1.23
Rate Impact Measure Test *(RIM)*	0.94
Participant Test	1.57

DEP requests that the Commission:

Approve the Residential Service – Smart $aver Energy Efficiency Program and tariff (formerly known as the Home Energy Improvement Program provided on Attachment A until such time that the Commission orders otherwise;

DEP requests the recovery of applicable Program costs, net lost revenues, and utility incentives and will seek recovery of these costs through its annual Demand-Side Management and Energy Efficiency ("DSM/EE") cost-recovery rider, consistent with the DSM/EE cost recovery procedures approved in Docket No. 2015-163-E.

Please feel free to contact me should there be any questions or issues.

Yours truly,

Frank R. Ellerbe, III

FRE:tch

Enclosures

cc: Jeffrey M. Nelson, Esquire (via email)
Rebecca J. Dulin, Senior Counsel (via mail)
Heather Shirley Smith, Deputy General Counsel (via email)

Duke Energy Progress, LLC
(South Carolina Only)

RP-3

RESIDENTIAL SERVICE – SMART $AVER® ENERGY EFFICIENCY PROGRAM - RSSEE-2

PURPOSE

The purpose of this program is to encourage the purchase and installation of energy conservation measures designed to increase energy efficiency in new or existing residential dwellings.

PROGRAM

- The program is available to owners of individually metered residences including single family detached, duplexes, townhomes, condominiums, and mobile homes, who are served on a residential service schedule.

- The types of equipment, products, and services eligible for incentives may include, but are not limited to, the following:
  - Heating Ventilation and Air Conditioning (HVAC) equipment
  - Smart thermostats
  - Thermal boundary improvements
  - HVAC duct improvements
  - Water conditioning and/or pumps
  - Other high efficiency equipment, products, and services as determined by the Company on a case by case basis.

- New HVAC equipment must (1) achieve or exceed the minimum Seasonal Energy Efficiency Ratio (SEER), Energy Efficiency Ratio (EER), and/or Heating Seasonal Performance Factor (HSPF) allowed by law and (2) meet all other Duke Energy requirements to achieve designated energy savings.

- The new HVAC system must include a properly matched outdoor unit and inside coil, which must be listed as such by the Air Conditioning, Heating and Refrigeration Institute (AHRI) or any additional certification directory as approved by Duke Energy.

- Qualifying Smart Thermostats (Wi-Fi enabled) must be installed at the time of a qualifying HVAC installation and may be subject to Duke Energy requirements regarding installation, installer, programming, functionality, and square footage of conditioned space.

- Duke Energy will establish performance requirements deemed necessary to ensure achievement of minimum energy savings for other equipment, products, and services offered for incentives. Parameters related to these performance requirements may include, but are not limited to, diagnostic testing, size of conditioned area, building/structure type, energy reduction achievement, installer/installation, and product selection.

- All improvements eligible for payment under this program must be installed based on manufacturer's recommendations and the Company's specifications, including installation by a Company-approved contractor, unless otherwise noted in program requirements. Detailed requirements are available on the Company's website at www.duke-energy.com.

- The Company may vary the incentive by type of equipment and differences in efficiency to induce customers to purchase greater levels of efficiency at the minimum necessary incentive amount. The Company may offer multiple levels of incentives corresponding to varied efficiency levels of equipment or service.

- The Company reserves the right to adjust the incentive on a periodic basis, as appropriate, to reflect changes to efficiency standards and market conditions.

- The Company reserves the right to limit the availability of incentives by the type of residential structure.

- The current amount of the incentive payment for eligible equipment, products, and services will be posted to the Company's website at www.duke-energy.com.

- Incentives may be limited to one of any product, per residence, under all Company Energy Efficiency Programs.

- With Company approval, the owner or customer may designate that incentive be provided to a third-party.

- To qualify for payment under this program, qualifying improvements must be made on or after September 1, 2017 and the application for payment must be made within 90 days of completion of the work

- All energy conservation measures installed shall be subject to inspection by Company for the purposes of program evaluation, measurement, and verification.

PAYMENT

The Company's incentives for individual equipment, products, and services may be offered in a variety of ways, including, but not limited to, point-of-sale discounts, checks, and prepaid credit cards. Incentive payments shall be determined by the Company in an amount not to exceed the following:

- HVAC equipment installations - $600
- Thermal boundary improvements - $250
- Duct system improvements - $100
- Variable speed pool pump installations - $300
- Heat Pump Water Heater installations - $350
- For all other appliances and devices provided under this program the incentive will be an amount not to exceed 50% of the installed cost difference between standard equipment or service and higher efficiency equipment or service.

COMPANY RETENTION OF PROGRAM BENEFITS

Incentives and other considerations offered under the terms of this Program are understood to be an essential element in the recipient's decision to participate in the Program. Upon payment of these considerations, Company will be entitled to any and all environmental, energy efficiency, and demand reduction benefits and attributes, including all reporting and compliance rights, associated with participation in the Program.

Supersedes Programs HEIP-6
Effective for service rendered on and after _____
SCPSC Docket No. 2016-149-E, Order No. _____

Attachment B
Participation

Smart $aver Energy Efficiency Program		
1	Measure Life (Average)	15
2	Free Rider % (Average)	19.4%
3	Incremental Participants Year 1	7,507
4	Incremental Participants Year 2	7,926
5	Incremental Participants Year 3	8,135
6	Incremental Participants Year 4	0
7	Incremental Participants Year 5	0
8	Cumulative Participation Year 1	7,507
9	Cumulative Participation Year 2	15,433
10	Cumulative Participation Year 3	23,568
11	Cumulative Participation Year 4	23,568
12	Cumulative Participation Year 5	23,568
13	Cumulative Summer Coincident kW w/ losses (net free) Year 1	992
14	Cumulative Summer Coincident kW w/ losses (net free) Year 2	2,048
15	Cumulative Summer Coincident kW w/ losses (net free) Year 3	3,150
16	Cumulative Summer Coincident kW w/ losses (net free) Year 4	3,150
17	Cumulative Summer Coincident kW w/ losses (net free) Year 5	3,150
18	Cumulative kWh w/ losses (net free) Year 1	3,645,323
19	Cumulative kWh w/ losses (net free) Year 2	7,556,211
20	Cumulative kWh w/ losses (net free) Year 3	11,688,592
21	Cumulative kWh w/ losses (net free) Year 4	11,688,592
22	Cumulative kWh w/ losses (net free) Year 5	11,688,592
23	Per Participant Weighted Average Coincident Saved Winter kW w/ losses	0.092
24	Per Participant Weighted Average Coincident Saved Summer kW w/ losses	0.161
25	Per Participant Average Annual kWh w/ losses (net free) Year 1	486
26	Per Participant Average Annual kWh w/ losses (net free) Year 2	490
27	Per Participant Average Annual kWh w/ losses (net free) Year 3	496
28	Per Participant Average Annual kWh w/ losses (net free) Year 4	496
29	Per Participant Average Annual kWh w/ losses (net free) Year 5	496
30	Cumulative Lost Revenue (net free) Year 1	$368,597
31	Cumulative Lost Revenue (net free) Year 2	$783,234
32	Cumulative Lost Revenue (net free) Year 3	$1,241,978
33	Cumulative Lost Revenue (net free) Year 4	$1,273,027
34	Cumulative Lost Revenue (net free) Year 5	$1,304,853
35	Average Lost Revenue per Participant (net free) Year 1	$49
36	Average Lost Revenue per Participant (net free) Year 2	$51
37	Average Lost Revenue per Participant (net free) Year 3	$53
38	Average Lost Revenue per Participant (net free) Year 4	$54
39	Average Lost Revenue per Participant (net free) Year 5	$55
40	Total Avoided Costs/MW saved Year 1	$119,178
41	Total Avoided Costs/MW saved Year 2	$121,957
42	Total Avoided Costs/MW saved Year 3	$124,873
43	Total Avoided Costs/MW saved Year 4	$127,960
44	Total Avoided Costs/MW saved Year 5	$131,153
45	Total Avoided Costs/MWh saved Year 1	$41
46	Total Avoided Costs/MWh saved Year 2	$42
47	Total Avoided Costs/MWh saved Year 3	$60
48	Total Avoided Costs/MWh saved Year 4	$63
49	Total Avoided Costs/MWh saved Year 5	$63

Attachment C
Cost-Effectiveness Evaluation

Smart $aver Energy Efficiency Program					
		UCT	**TRC**	**RIM**	**Participant**
1	Avoided T&D Electric	$1,778,696	$1,778,696	$1,778,696	$0
2	Cost-Based Avoided Elec Production	$8,646,288	$8,646,288	$8,646,288	$0
3	Cost-Based Avoided Elec Capacity	$2,476,266	$2,476,266	$2,476,266	$0
4	Participant Elec Bill Savings (gross)	$0	$0	$0	$16,095,250
5	Net Lost Revenue Net Fuel	$0	$0	$9,065,436	$0
6	EM&V Costs	$494,009	$494,009	$494,009	$0
7	Implementation Costs	-$1,305,862	-$1,305,862	-$1,305,862	$0
8	Incentives	$5,055,769	$0	$5,055,769	$5,055,769
9	Other Utility Costs	$344,405	$344,405	$344,405	$0
10	Participant Costs	$0	$10,979,418	$0	$13,432,858
11	Total Benefits	$12,901,251	$12,901,251	$12,901,251	$21,151,018
12	Total Costs	$4,588,321	$10,511,970	$13,653,757	$13,432,858
13	**Benefit/Cost Ratios**	**2.81**	**1.23**	**0.94**	**1.57**

Data represents present value of costs and benefits over the life of the program.